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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/458,605 | 12/10/1999 | KOJI URASAWA | 9976-007-(BO) | 9071 |

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2005 MARKET STREET, SUITE 2200
PHILADELPHIA, PA 19103-7013

EXAMINER

TRAN, DOUGLAS Q

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2624

DATE MAILED: 06/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/458,605

Applicant(s)

URASAWA, KOJI

Examiner

Douglas Q. Tran

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Shimizu (US Patent No. 6,490,055) and Kawamoto et al. (US Patent No. 6,120,197).

As to claim 11, Shimizu teaches a printing data processor comprising:

a printing data memory (2 in fig. 1) for storing printing data, the printing data being output from a host in the form of a page description language (i.e., PDL 101 in fig. 2) and corresponding to a plurality of pages (col. 4, lines 42-45); and

an editing process part which edits (fig. 5) the printing data into intermediate (i.e., display list), data corresponding to the plurality of pages and generates page state information corresponding to intermediate data (106 and 107 in fig. 2).

Although Shimizu teaches the printing data is performed at the print engine, Shimizu does not teach a printing speed control of each of plurality of pages is updated based on the page state information.

Kawamoto teaches a printing speed control of each of plurality of pages is updated based on the page state information (fig. 8, 10 and fig. 17).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the image processing of Shimizu for a printing speed control of each of plurality of pages is updated based on the page state information as taught by Kawamoto. The suggestion for modifying the system of Shimizu can be reasoned by one of ordinary skill in the art as set forth above by Kawamoto because of such modification system would increase the reliability and more accuracy when the print data is performed based on the state of page information.

As to claim 12, Shimizu discloses every feature discussed in claim 11, and further teaches of the editing process part has a page state information memory for storing the page state information corresponding to the page, wherein with respect to the page, a final page state information stored in the page state information memory is added into the printing data with intermediate form (please see step of 109 in fig. 2).

As to claim 13, Kawamoto discloses every feature discussed in claim 12, and further teaches the page state information added into the printing data with intermediate form has the same form as the intermediate form (col. 8, lines 18-22).

As to claim 14, Kawamoto disclose every feature discussed in claim 11, and further teaches the page state information indicates whether color data or monochrome data is printed on the page (fig. 8).

As to claim 15, Shimizu discloses every feature discussed in claim 11, and further teaches the editing process part has a decoding process part for separating the printing data output from the host into commands; and a command process part for executing a pre-process with respect to each command output from the decoding part (col. 4, lines 19-26).

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As to claim 16, Shimizu discloses every feature discussed in claim 11, and further teaches the printing data with intermediate form is printing data expressed by display list form (103 in fig. 2).

As to claim 17, Shimizu discloses every feature discussed in claim 11, and further teaches a reading out part for reading out the page state information, in order to control a printing operation depending upon the page state information (107 in fig. 2).

As to claim 18, Kawamoto teaches based on the page state information, a proper process part is selected from the plurality of process parts (fig. 16)

As to claim 19, Kawamoto teaches a printing speed decision for changing printing speed (fig. 17).

As to claim 20, Kawamoto disclose every feature discussed in claim 19, and further teaches the printing speed of color is slower than the printing speed of monochrome (fig. 17).

As to claim 21, Kawamoto disclose every feature discussed in claim 20, and further teaches following a monochrome printing is set by the printing speed of color (fig. 2).

As to claim 22, Kawamoto disclose every feature discussed in claim 18, and further teaches the page state judgment part judges whether the printing data is color data or monochrome data (fig. 8).

As to claim 23, disclose every feature discussed in claim , and further teaches if monochrome data and color data are intermingling in printing data of one page, the page state judgment par judges that the page is color data (fig. 5).

As to claim 24, Shimizu disclose every feature discussed in claim 11, and further teaches a system management part for judging the timing for expansively processing the printing data received from the host into printing data with bit map format bit map printing data memory for storing the printing data with bit map form, wherein the system management part judges a memory use amount used for expanding the printing data to be expanded into printing data with bitmap form, based on the judgment results of the page state judgment part; and selectively stores the printing data into either of the printing data memory and the bit map printing data memory, depending upon the memory use amount (105 in fig. 2, col. 8, lines 21-35).

As to claim 25, Shimizu disclose every feature discussed in claim 21, and further teaches the system management part, when it is judged that the memory use amount corresponding to the printing data is bigger, stores the printing data into the printing data memory; and when it is judged that the memory use amount corresponding to the printing data is smaller, stores the printing data with bitmap form in expanded state into the printing data memory (fig. 7, col. 8, lines 21-35).

As to claim 26, Shimizu disclose every feature discussed in claim 18, and further teaches the usagewise separated register process part is provided in an expansion process part for expanding the edited printing data (5 in fig. 1).

As to claim 27, Shimizu disclose every feature discussed in claim 18, and further teaches an expansion process part expands the printing data into memory obtained based on a judgment result of the page state judgment part (10 in fig. 1).

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As to claims 28-33, due to the similarities of these claims to those of claims 11 and 24-27, these claims are rejected as the reasons applied to claims 11 and 24-27.

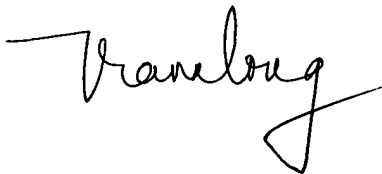
Response to Arguments

Applicant's arguments with respect to claims 11-33 have been considered but are moot in view of the new ground(s) of rejection. This action is made **non-final**.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (703) 305-4857 or E-mail address is Douglas.tran@uspto.gov.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Douglas Q. Tran
May 30, 2004

A handwritten signature in black ink, appearing to read "Tran Douglas", with a stylized flourish at the end.